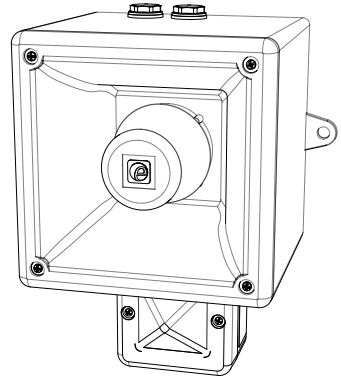


INSTRUCTION & SERVICE MANUAL

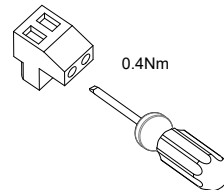
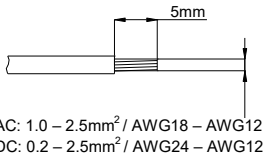
AL112NH AlertAlight Combined Sounder LED

- -40°C to +66°C (-40°F to 151°F)
- Type 4 / 4X / 3R / 13, IP66
- 2.7Kg (5.94lb)
- CE, UKCA
- All units UL Listed



Unit Type Code	Nominal Voltage	Voltage Range	Nominal Beacon Current*	Nominal Sounder Current* P1 / P2	Nominal SPL P1 / P2	Max SPL P1 / P2	Average SPL P1 / P2
AL112NHDC024	#12 Vdc	11.5-14Vdc	79.5mA	280mA / 376mA	113.7dB(A) / 116.6dB(A) Tone 44 @ 1m	115dB(A) / 118.4dB(A) Tone 4 @ 1m	110.8dB(A) / 114.8dB(A) All Tones @ 1m
	24 Vdc	16-33 Vdc (Regulated)	87mA	225mA / 430mA			
AL112NHDC048	48 Vdc	48-54 Vdc	60mA	122mA / 223mA			
AL112NHAC230	115 Vac	100-240 Vac 50/60Hz	34mA	100mA / 173mA			
	230 Vac		19mA	65mA / 105mA			

*Nominal current at nominal voltage; #Factory Default setting 24Vdc, beacon customer settable to 12Vdc



Attention: Installation must be carried out by an electrician in compliance with the latest codes and regulations.

Attention: L'installation doit être effectuée par un électricien conformément aux derniers codes et réglementations.

Achtung: Die Installation muss von einem Elektriker gemäß den neuesten Vorschriften und Bestimmungen durchgeführt werden.

Attenzione: L'installazione deve essere eseguita da un elettricista in conformità con i codici e le normative più recenti.

Atención: La instalación debe ser realizada por un electricista de acuerdo con los últimos códigos y regulaciones.

Atenção: A instalação deve ser realizada por um electricista de acordo com os códigos e regulamentos mais recentes.

Внимание: установка должна выполняться электриком в соответствии с последними нормами и правилами.

Attention: Disconnect from power source before installation or service to prevent electric shock

Attention: Débranchez-le de la source d'alimentation avant l'installation ou l'entretien pour éviter tout choc électrique.

Achtung: Vor Installation oder Wartung von der Stromquelle trennen, um einen Stromschlag zu vermeiden.

Attenzione: scollegare dall'alimentazione prima dell'installazione o dell'assistenza per evitare scosse elettriche.

Atención: desconéctelo de la fuente de alimentación antes de la instalación o el servicio para evitar descargas eléctricas.

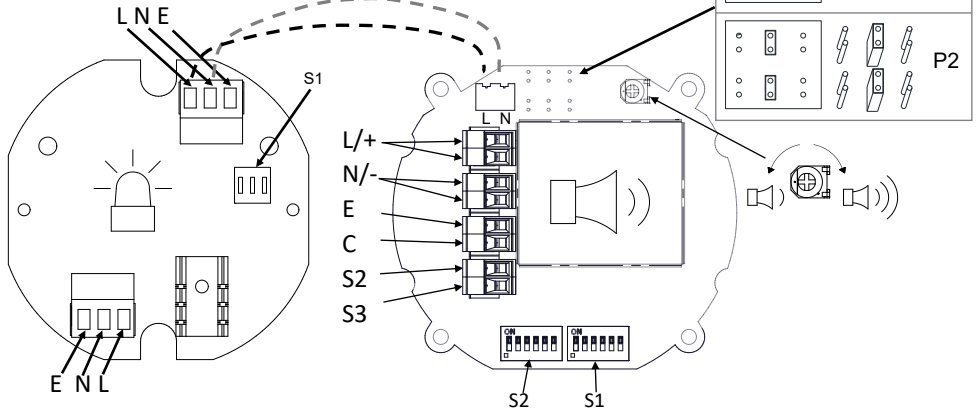
Atenção: Desconecte da fonte de alimentação antes da instalação ou serviço para evitar choque elétrico

Внимание: отключите от источника питания перед установкой или обслуживанием, чтобы предотвратить поражение электрическим током.



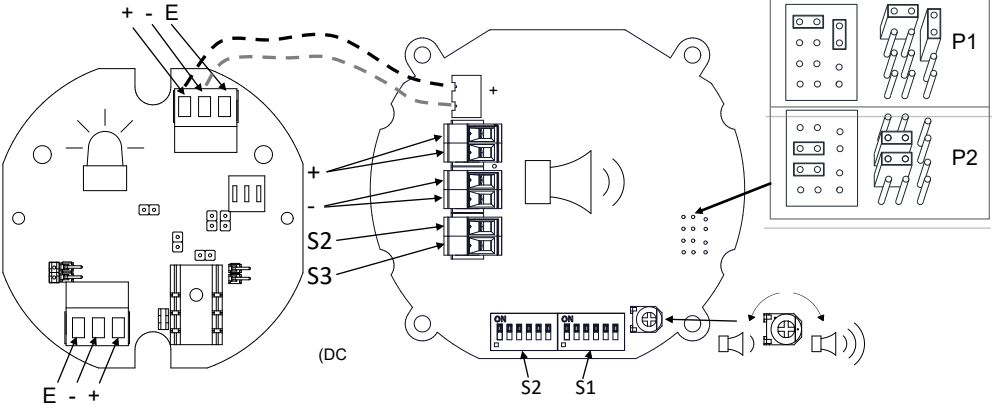
AC

See D221-06-305



DC

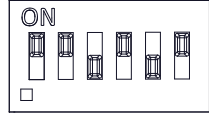
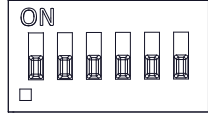
See D221-06-301



(AC & DC, See D221-95-001)

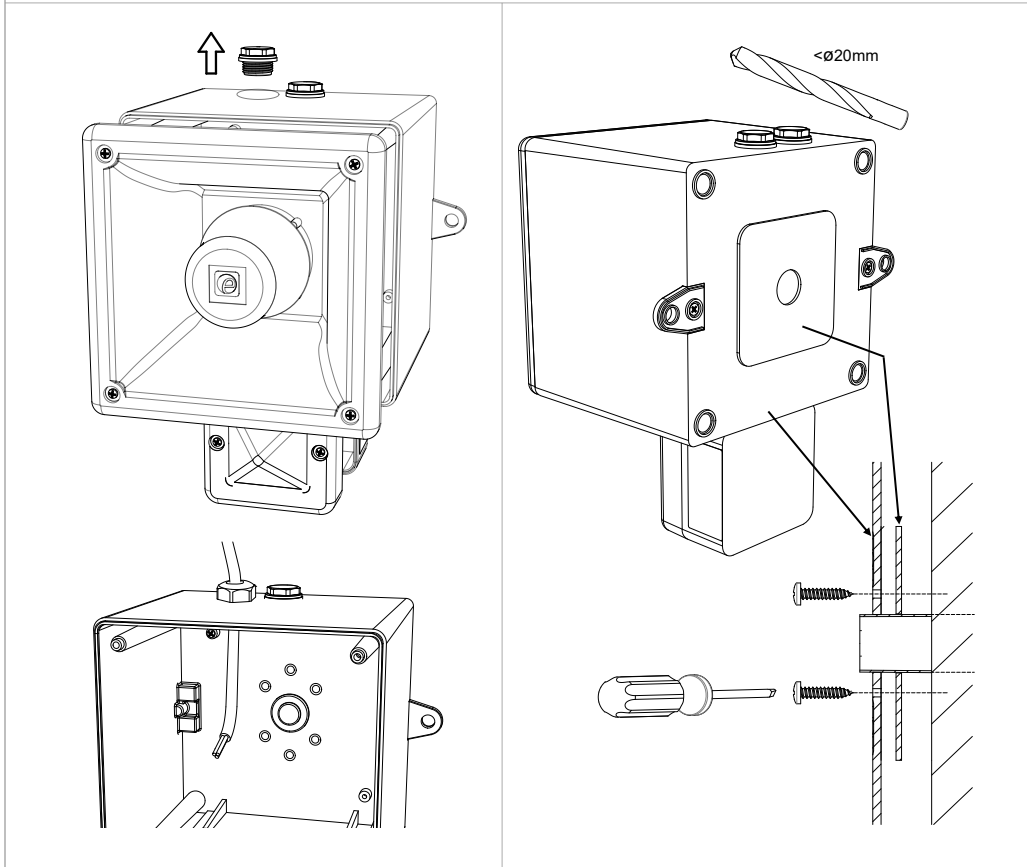
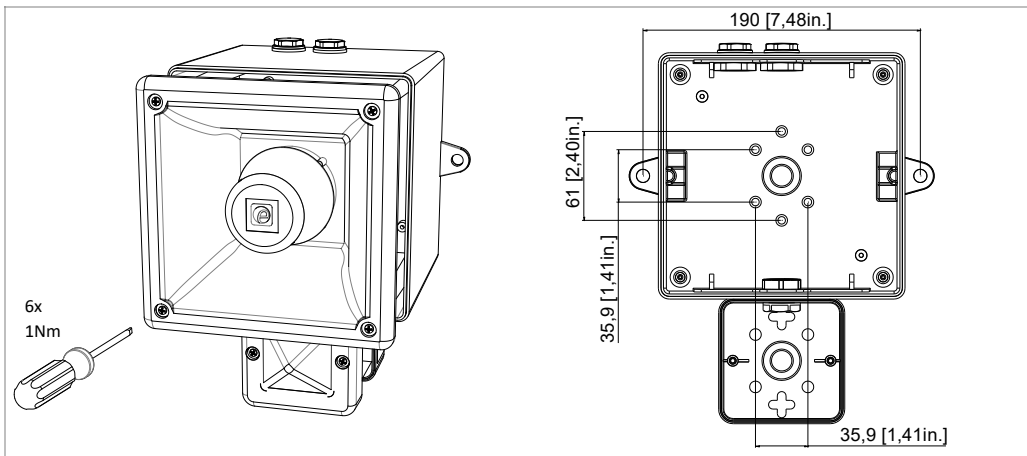
Default = S2 - Tone 1

Default = S1 - Tone 44



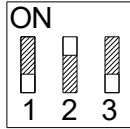
(ON = 1, OFF = 0)

INSTRUCTION & SERVICE MANUAL
AL112NH AlertAlight Combined Sounder LED



S1 - LED Flash Mode Settings (AC & DC)

The Flash Mode Dip Switch can be changed to set the desired flash pattern



Flash Mode DIP Switch – Shown with 1-OFF, 2-ON, 3-OFF (0 1 0), This denotes Flash mode 1Hz. For further flash modes refer to table:

Switch Setting	Flash Mode
0 0 0	Steady on
1 0 0	Blinking
0 1 0	Flashing 1Hz*
1 1 0	Flashing 1.5Hz*
0 0 1	Flashing - Double Strike
1 0 1	Flashing - Triple Strike
0 1 1	Flashing 2Hz*
1 1 1	Flashing - Temporal

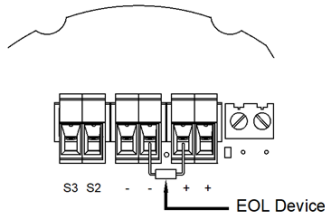
- All models are approved for use as Audible Signal and Visual Appliance for use as General Signaling: UL464A & CSA C22.2 No 205-17
- Type 4 / 4X / 3R / 13, IP66
- -40°C to +66°C / -40°C to +151°F

General Signaling Canada:

AL112NHDC: -40°C to +55°C / -40°F to +131°F
 AL112NHAC: -40°C to +40°C / -40°F to +104°F



- To maintain Ingress Protection, cable entries must be fitted with suitably rated cable glands or stopping plugs
- EOL Monitoring (DC Only): End of Line Devices may be fitted between the +ve & -ve terminals of the PCBA (See diagram below). Please ensure that the device legs meet the wire size range stated for the connection terminals and are fitted correctly in order to avoid a short. Refer to the compatible control panel specification for EOL device values and ratings
- All DC Units have a blocked diode fitted in their supply input lines which allows reverse polarity monitoring.
- Note that the maximum forward polarity monitoring voltage is 6V. A monitoring voltage greater than 6V may activate the alarm horn sounder and the 2nd, 3rd or 4th stages.



Model	Nominal Voltage	Voltage Range	Nominal Operating Current*		Max Operating RMS [#]	
			Beacon	Sounder P1 / P2	Beacon	Sounder P1 / P2
AL112NHDC024	12V dc	11.5-14Vdc	79.5mA	280mA / 376mA	168mA	280mA / 430mA
	24V dc	16-33Vdc (Regulated)	87mA	225mA / 430mA	183mA	
AL112NHDC048	48V dc	48-54Vdc	60mA	122mA / 223mA	115mA	
AL112NHAC230	115 Vac	100-240Vac 50/60Hz	34mA	100mA / 173mA	166mA	101mA / 181mA
	230 Vac		19mA	65mA / 105mA		

*Max Operating current for worst-case input voltage and worst case flash pattern

Stage 1 Set DIP SW 1 Tone No.	Tone Description	Tone Visual	Stage 1 & 2 DIP SW 1/2 Settings 1 2 3 4 5 6	Stage 3 Set DIP SW 1 (S3)	Stage 4 Set DIP SW 1 (S2 + S3)
1	1000Hz PFEER Toxic Gas		0 0 0 0 0	2	44
2	1200/500Hz @ 1Hz DIN /PFEER P.T.A.P.		1 0 0 0 0	3	44
3	1000Hz @ 0.5Hz(1s on, 1soff) PFEER Gen. Alarm		0 1 0 0 0 0	2	44
4	1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s NF C 48-265		1 1 0 0 0 0	24	1
5	544Hz(100mS)/440Hz (400mS) NF S 32-001		0 0 1 0 0 0	19	1
6	1500/500Hz - (0.5s on , 0.5s off) x3 + 1s gap AS4428		1 0 1 0 0 0	44	1
7	500-1500Hz Sweeping 2 sec on 1 sec off AS4428		0 1 1 0 0 0	44	1
8	500/1200Hz @ 0.26Hz (3.3son, 0.5s off) Netherlands - NEN 2575		1 1 1 0 0 0	24	35
9	1000Hz (1s on, 1s off)x7 + (7s on, 1s off) IMO Code 1a		0 0 0 1 0 0	34	1
10	1000Hz (1s on, 1s off)x7 + (7s on, 1s off) IMO Code 1a		1 0 0 1 0 0	34	1
11	420Hz(0.5s on, 0.5s off)x3 + 1s gap ISO 8201 Temporal Pattern		0 1 0 1 0 0	1	8
12	1000Hz(0.5s on, 0.5s off)x3 + 1s gap ISO 8201 Temporal Pattern		1 1 0 1 0 0	1	8
13	422/775Hz - (0.85 on, 0.5 off) x3 + 1s gap NFPA - Temporal Coded		0 0 1 1 0 0	1	8
14	1000/2000Hz @ 1Hz Singapore		1 0 1 1 0 0	3	35
15	300Hz Continuous (f=300)		0 1 1 1 0 0	24	1
16	440Hz Continuous (f=440)		1 1 1 1 0 0	24	1
17	470Hz Continuous (f=470)		0 0 0 0 1 0	24	8
18	500Hz Continuous IMO code 2 (Low) (f=500)		1 0 0 0 1 0	24	8
19	554Hz Continuous (f=554)		0 1 0 0 1 0	24	8
20	660Hz Continuous (f=660)		1 1 0 0 1 0	24	35
21	800Hz IMO code 2 (High) (f=800)		0 0 1 0 1 0	24	35
22	1200Hz Continuous (f=1200)		1 0 1 0 1 0	24	35
23	2000Hz Continuous (f=2000)		0 1 1 0 1 0	3	35
24	2400Hz Continuous (f=2400)		1 1 1 0 1 0	20	35
25	440Hz @0.83Hz (50 cycles/minute) Intermittent (f=440, a=0.6, b=0.6)		0 0 0 1 1 0	44	8
26	470Hz @0.9Hz - 1.1s Intermittent (f=470, a=0.55, b=0.55)		1 0 0 1 1 0	44	8
27	470Hz @5Hz - (5 cycles/second) Intermittent (f=470, a=0.1, b=0.1)		0 1 0 1 1 0	44	8
28	544Hz @ 1.14Hz - 0.875s Intermittent (f=470, a=0.43, b=0.44)		1 1 0 1 1 0	24	8
29	655Hz @ 0.875Hz Intermittent (f=655, a=0.57, b=0.57)		0 0 1 1 1 0	24	8
30	660Hz @0.28Hz - 1.8sec on, 1.8sec off Intermittent (f=660, a=1.8, b=1.8)		1 0 1 1 1 0	24	8
31	660Hz @3.34Hz - 150mS on, 150mS off Intermittent (f=660, a=0.15, b=0.15)		0 1 1 1 1 0	24	8
32	745Hz @ 1Hz Intermittent (f=745, a=0.5, b=0.5)		1 1 1 1 1 0	24	8
33	800Hz - 0.25sec on, 1 sec off Intermittent (f=800, a=0.25, b=1)		0 0 0 0 0 1	24	8
34	800Hz @ 2Hz IMO code 3.a (High) Intermittent (f=800, a=0.25, b=0.25)		1 0 0 0 0 1	24	19
35	1000Hz @ 1Hz Intermittent (f=1000, a=0.5, b=0.5)		0 1 0 0 0 1	24	19
36	2400Hz @ 1Hz Intermittent (f=2400, a=0.5, b=0.5)		1 1 0 0 0 1	24	19
37	2900Hz @ 5Hz Intermittent (f=2900, a=0.1, b=0.1)		0 0 1 0 0 1	24	19
38	363/518Hz @ 1Hz Alternating (f=363, f1=518, a=0.1)		1 0 1 0 0 1	8	19
39	450/500Hz @ 2Hz Alternating (f=450, f1=500, a=0.25)		0 1 1 0 0 1	8	19
40	554/440Hz @ 1Hz Alternating (f=440, f1=554, a=0.5)		1 1 1 0 0 1	24	19
41	554/440Hz @ 0.625Hz Alternating (f=440, f1=554, a=0.8)		0 0 0 1 0 1	8	19
42	561/760Hz @0.83Hz (50 cycles/minute) Alternating (f=561, f1=760, a=0.6)		1 0 0 1 0 1	8	19
43	780/600Hz @ 0.96Hz Alternating (f=600, f1=780, a=0.52)		0 1 0 1 0 1	8	19
44	800/1000Hz @ 2Hz Alternating (f=800, f1=1000, a=0.25)		1 1 0 1 0 1	24	19
45	970/800Hz @ 2Hz Alternating (f=800, f1=970, a=0.25)		0 0 1 1 0 1	8	19
46	800/1000Hz @ 0.875Hz Alternating (f=800, f1=1000, a=0.57)		1 0 1 1 0 1	24	19
47	2400/2900Hz @ 2Hz Alternating (f=2400, f1=2900, a=0.25)		0 1 1 1 0 1	24	19
48	500/1200Hz @ 0.3Hz Sweeping (f=500, f1=1200, a=3.34)		1 1 1 1 0 1	24	12
49	560/1055Hz @ 0.18Hz Sweeping (f=560, f1=1055, a=5.47)		0 0 0 0 1 1	24	12
50	560/1055Hz @ 3.3Hz Sweeping (f=560, f1=1055, a=0.3)		1 0 0 0 1 1	24	12
51	600/1250Hz @ 0.125Hz Sweeping (f=600, f1=1250, a=8)		0 1 0 0 1 1	24	12
52	660/1200Hz @ 1Hz Sweeping (f=660, f1=1200, a=1)		1 1 0 0 1 1	24	12
53	800/1000Hz @ 1Hz Sweeping (f=800, f1=1000, a=1)		0 0 1 0 1 1	24	12
54	800/1000Hz @ 7Hz Sweeping (f=800, f1=1000, a=0.14)		1 0 1 0 1 1	24	12
55	800/1000Hz @ 50Hz Sweeping (f=800, f1=1000, a=0.02)		0 1 1 0 1 1	24	12
56	2400/2900Hz @ 7Hz Sweeping (f=2400, f1=2900, a=0.14)		1 1 1 0 1 1	24	12
57	2400/2900Hz @ 1Hz Sweeping (f=2400, f1=2900, a=1)		0 0 0 1 1 1	24	12
58	2400/2900Hz @ 50Hz Sweeping (f=2400, f1=2900, a=0.02)		1 0 0 1 1 1	24	12
59	2500/3000Hz @ 2Hz Sweeping (f=2500, f1=3000, a=0.5)		0 1 0 1 1 1	24	12
60	2500/3000Hz @ 7.7Hz Sweeping (f=2500, f1=3000, a=0.13)		1 1 0 1 1 1	24	12
61	800Hz Motor Siren (f=800, a=1.6)		0 0 1 1 1 1	24	12
62	1200Hz Motor Siren (f=1200, a=2)		1 0 1 1 1 1	24	12
63	2400Hz Motor Siren (f=2400, a=1.7)		0 1 1 1 1 1	24	12
64	Simulated Bell		1 1 1 1 1 1	21	12

FIRE INSTRUCTION & SERVICE MANUAL

AL112NH Range AlertAight Combined Sounder LED Beacons

UL464 / CAN/ULC-S525 & UL1638 / CAN/ULC-S526

Model: AL112NHDC



Attention: Installation must be carried out by an electrician in compliance with the National Electrical Code, NFPA 70, and the National Fire Alarm Signaling Code, NFPA 72 or CSA 22.1 Canadian Electrical Code, Part I, Safety Standard for Electrical Installations, Section 32. / L'installation doit exclusivement être réalisée par du personnel qualifié, conformément au code national d'électricité américain, NFPA 70, et le code national d'alarme incendie et de signalisation NFPA 72 ou CSA 22.1 Code canadien de l'électricité, première partie, norme de sécurité relative aux installations électriques, Section 32

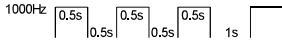


Attention: Disconnect from power source before installation or service to prevent electric shock / Débranchez-le de la source d'alimentation avant l'installation ou l'entretien pour éviter tout choc électrique.



Attention: Do not paint / Ne pas Peinturer

- -40°C to +66°C / -40°F to +151°F
- Units can be mounted using the 2-off ø7mm holes in the mounting lugs or through the back of the housing using the supplied gasket seal.
- AL112NHDC024 is approved for use as an Audible & Visual signal appliance for fire alarm use – Private Mode. (UL464 & CAN/ULC-S525 & UL1638 & CAN/ULC-S526).
- AL112NHDC024 produces a minimum sound pressure level of P1: US: 93.37dB(A); CA: 101.6dB(A) / P2: US: 94.64dB(A); CA: 103.9dB(A) at 10 feet (figures @ worst case 11.5Vdc).
- AL112NHDC024 produces a minimum sound pressure level of P1: US: 95.6dB(A); CA: 104.3dB(A) / P2: US: 98.55dB(A); CA: 107.6dB(A) at 10 feet (@24Vdc)
- For Fire Alarm applications, the Sounder Volume must be at the highest setting, (see volume control section). For fire alarm use, Tone 12 as shown below must be selected:

Stage 1 Set DIP SW 1 Tone No.	Tone Description	Tone Visual	Stage 1 & 2 DIP SW 1/2 Settings 1 2 3 4 5 6	Stage 3 Set DIP SW 1 (S3)	Stage 4 Set DIP SW 1 (S2 + S3)
12	1000Hz(0.5s on, 0.5s off)x3 + 1s gap ISO 8201 Temporal Pattern		1 1 0 1 0 0	1	8

- For private mode fire alarm use, the beacons must only be fitted with clear plastic lens covers and must be set to one of the certified flash patterns of 1Hz, 1.5Hz or 2Hz. Flash Pulse 196ms.
- For light output ratings see below:

On-axis light output rating per UL1638

Model	Intensity (cd) at 1Hz flash rate	Intensity (cd) at 1.5Hz flash rate	Intensity (cd) at 2Hz flash rate
AL112NHDC024 (12Vdc Mode)	5.9	5.97	6.35
AL112NHDC024 (24Vdc Mode)	11.65	12.32	12.38

- Connection Terminals: Pluggable
AC: 1.0 - 2.5mm² / AWG18 - AWG12
DC: 0.2 - 2.5mm² / AWG24 - AWG12
- Terminal Tightening torque 0.4Nm
- To maintain Ingress Protection, cable entries must be fitted with suitably rated cable glands or stopping plugs
- Units can be located indoor or outdoor wet use, wall or ceiling mounted and there are no limitations on orientation
- Factory finishes are not intended to be modified

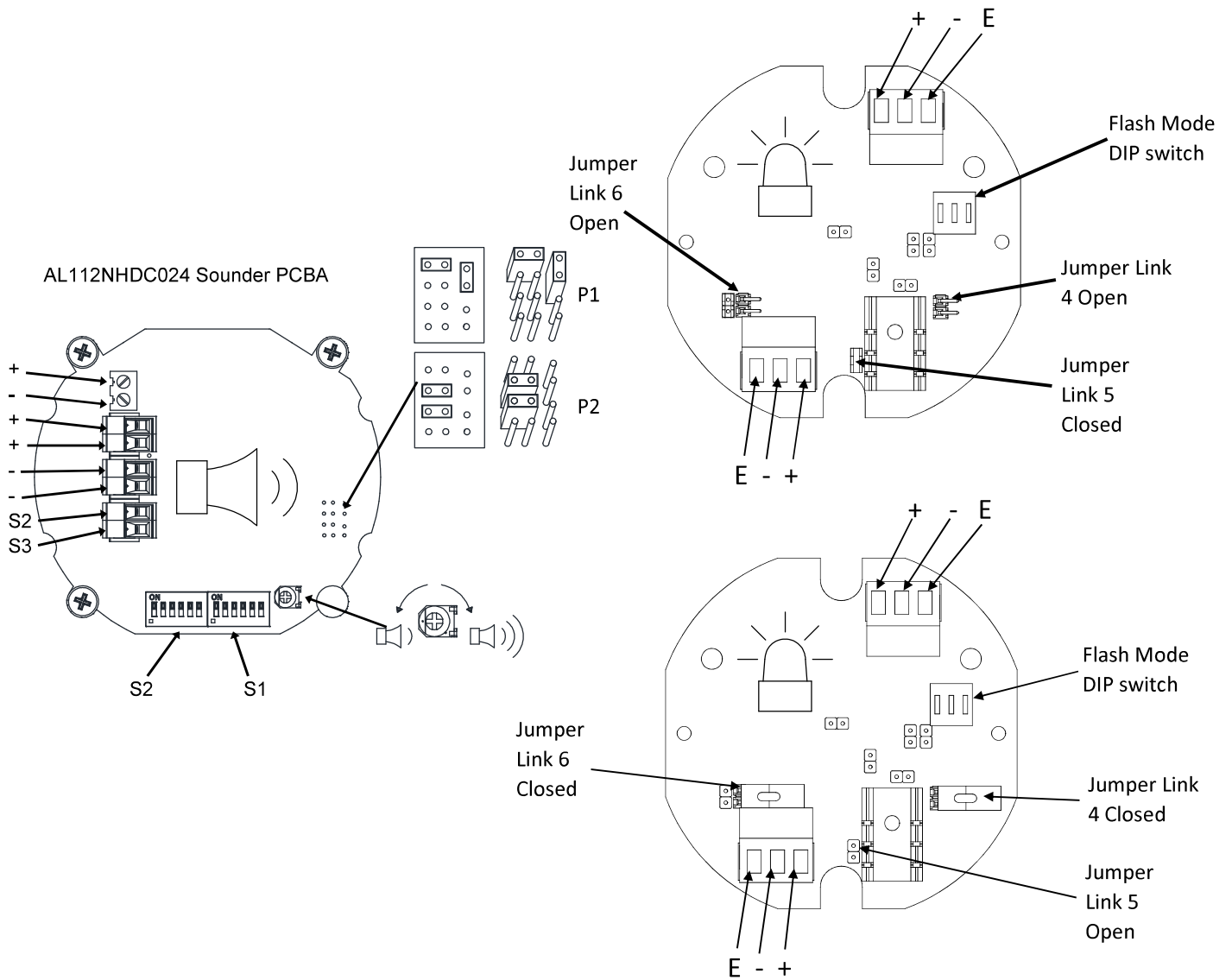
Surge current ratings for use in fire alarm systems

Model	Nominal Voltage	Voltage Range	Flash Rate	Initial Peak (mA)		Initial RMS (mA)	
				Beacon	Sounder	Beacon	Sounder
AL112HDC024	12Vdc	11.5 to 14Vdc	1 Hz	202	P1: 1455mA / P2: 1164mA	172	P1: 140mA / P2: 286mA
			1.5Hz	216		172	
			2Hz	224		172	
	24Vdc	16 to 33Vdc (Regulated)	1 Hz	950		204.3	
			1.5Hz	968.5		206.7	
			2Hz	969		205.2	

AL112HDC024 Sounder Directional Characteristics for Canadian Fire CAN/ULC-S525 at 10 feet

Horizontal Axis				Vertical Axis			
Angle	OSPL	Angle	OSPL	Angle	OSPL	Angle	OSPL
Reference 90°	103.7 dB(A)	Reference 90°	103.7 dB(A)	Reference 90°	103.8 dB(A)	Reference 90°	103.78dB(A)
129°	-3 dB(A)	49°	-3 dB(A)	126°	-3 dB(A)	49°	-3 dB(A)
131°	-6 dB(A)	39°	-6 dB(A)	140°	-6 dB(A)	40°	-6 dB(A)
180°	92.6 dB(A)	0°	91.2 dB(A)	180°	92.5 dB(A)	0°	90.8 dB(A)

AL112NHDC024 Beacon PCBA (24VDC Mode – Default Setting)



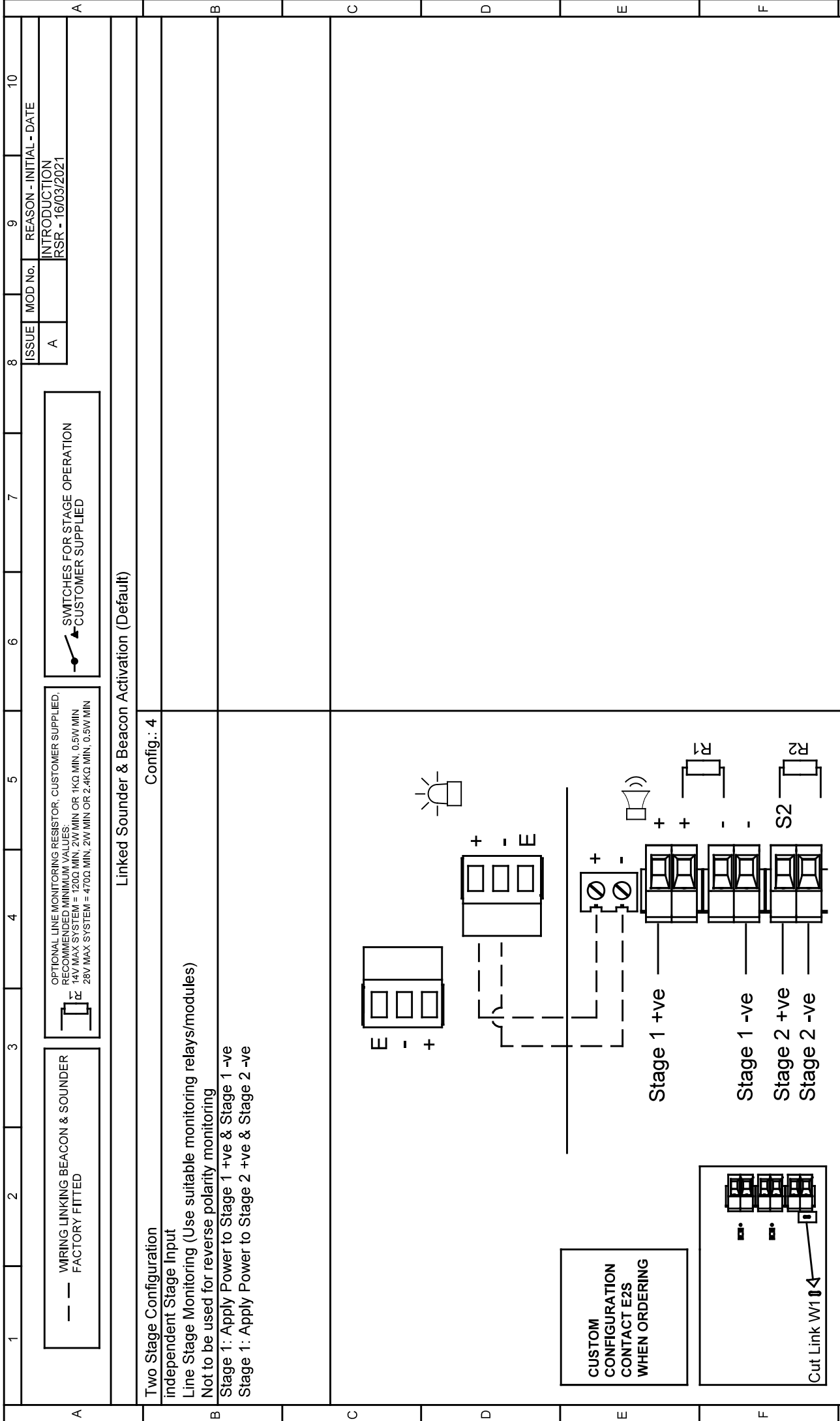
AL112NHDC024 Beacon PCBA (12VDC Mode – Customer to Set)

Jumper Setting	Jumper Link 4	Jumper Link 5	Jumper Link 6
24VDC Mode (Default)	Open	Closed	Open
12VDC Mode (Customer Set)	Closed	Open	Closed

1	2	3	4	5	6	7	8	9	10
WIRING LINKING BEACON & SOUNDER FACTORY FITTED		OPTIONAL LINE MONITORING RESISTOR, CUSTOMER SUPPLIED. RECOMMENDED MINIMUM VALUES: 14V MAX SYSTEM = 120Ω MIN, 2W MIN OR 1KΩ MIN, 0.5W MIN 28V MAX SYSTEM = 470Ω MIN, 2W MIN OR 2.4KΩ MIN, 0.5W MIN		ISSUE MOD No. REASON - INITIAL - DATE A		INTRODUCTION RSR - 16/03/2021			

Linked Sounder & Beacon Activation (Default)									
Single Stage Configuration Line Monitoring Set to positive switching (default) Stage 1: Apply Power to Stage 1 +ve & Stage 1 -ve		Config.: 1a Two Stage Configuration Common Negative Set to positive switching (default) Stage 1: Apply Power to Stage 1 +ve & Common -ve Stage 2: Apply Power to Stage 2 +ve & Common -ve		Config.: 1b Three/Four Stage Configuration Common Negative Set to positive switching (default) Stage 1: Apply Power to Stage 1 +ve & Common -ve Stage 2: Apply Power to Stage 2 +ve & Common -ve Stage 3: Apply Power to Stage 3 +ve & Common -ve Stage 4: Apply Power to Stage 2 +ve, Stage 3 +ve & Common -ve		Config.: 1c			

DRAWING TO BS6888:2000 GEOMETRIC TOLERANCES TO ISO1101:1983 LINEAR DIMENSIONAL TOLS ANGULAR DIMENSIONAL TOLS		DRAWN R.S. RAIT	DATE 16/03/2021	SURFACE FINISH MATERIAL	WEIGHT (kg)		
STANDARDS ALERTALARM RANGE		CHECKED B. ISARD	DATE 16/03/2021	ALTERNATIVE MATERIAL		ALL DIMENSIONS IN MM IF IN DOUBT, ASK - DO NOT SCALE	
APPROVED R.N.POTTS		DATE 16/03/2021	EUROPEAN SAFETY SYSTEMS LTD. MANUFACTURING OR WRITTEN CONSENT.		EUROPEAN SAFETY SYSTEMS LTD. ACTION MANSELL ROAD LONDON W3 7QH WWW.ESS.COM		TITLE AL112NH & AL121H DC COMBINED SOUNDER & LED WIRING DIAGRAMS
SCALE NTS 1 OF 6		SHEET D221-06-251		DRAWING NUMBER		D221-06-251	



DRAWING TO BS6888:2000 GEOMETRIC TOLERANCES TO ISO 1101:1983 LINEAR DIMENSIONAL TOLS ANGULAR DIMENSIONAL TOLS		DRAWN R.S.RAIT	DATE 16/03/2021	SURFACE FINISH	WEIGHT (kg)			ALL DIMENSIONS IN MM IF IN DOUBT, ASK - DO NOT SCALE	A3
STANDARDS ALERTALARM RANGE	CHECKED B.ISARD	DATE 16/03/2021	MATERIAL	THIS DRAWING AND ANY INFORMATION OR DESCRIPTIVE INFO IS THE PROPERTY OF EUROPEAN SAFETY SYSTEMS LTD. NEITHER THE WHOLE OR ANY EXTRACT MAY BE DISCLOSED, LOANED, COPIED OR USED FOR MANUFACTURING PURPOSES WITHOUT THEIR WRITTEN CONSENT.				TITLE AL112NH & AL121H DC COMBINED SOUNDER & LED WIRING DIAGRAMS	
	APPROVED R.N.POTTS	DATE 16/03/2021	ALTERNATIVE MATERIAL	EUROPEAN SAFETY SYSTEMS LTD. 100 MANSFIELD ROAD LONDON W3 7QH WWW.E2S.COM		SCALE NTS	SHEET 3 OF 6	DRAWING NUMBER D221-06-251	

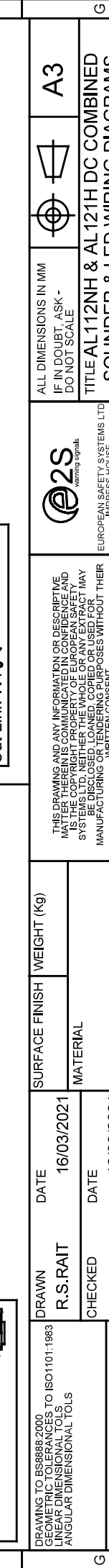
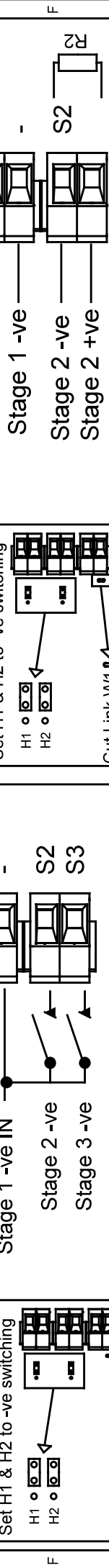
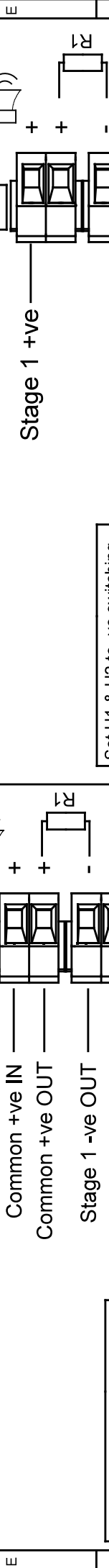
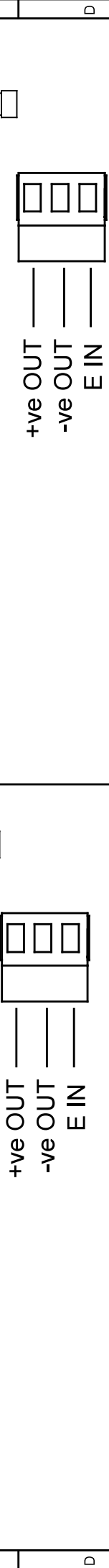
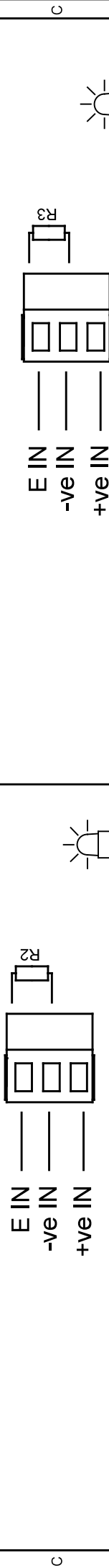
Independent Sounder & Beacon Activation (Remove Link Wire)

Three/Four Stages. Voltage Free 2nd, 3rd & 4th Stage Activation Configuration Config.: 6

Common Positive

Customer Set H1 & H2 to Negative Switching (See Below)

Stage 1: Apply Power to Common +ve & Stage 1 -ve
 Stage 2: Apply Power to Common +ve & Stage 1 -ve & connect Stage 2 -ve to Stage 1 -ve
 Stage 3: Apply Power to Common +ve & Stage 1 -ve & connect Stage 3 -ve to Stage 1 -ve
 Stage 4: Apply Power to Common +ve & Stage 1 -ve & connect Stage 2 -ve & Stage 3 -ve to Stage 1 -ve



DRAWING TO BS8888:2000 GEOMETRIC TOLERANCES TO ISO1101:1983 LINEAR DIMENSIONAL TOLS ANGULAR DIMENSIONAL TOLS	DRAWN	DATE	SURFACE FINISH	WEIGHT (kg)
	R.S. RAIT	16/03/2021	MATERIAL	
STANDARDS ALERTALARM RANGE	CHECKED	DATE	ALTERNATIVE MATERIAL	
	B. ISARD	16/03/2021		
ALERTALARM RANGE	APPROVED	DATE		
	R.N.POTTS	16/03/2021		



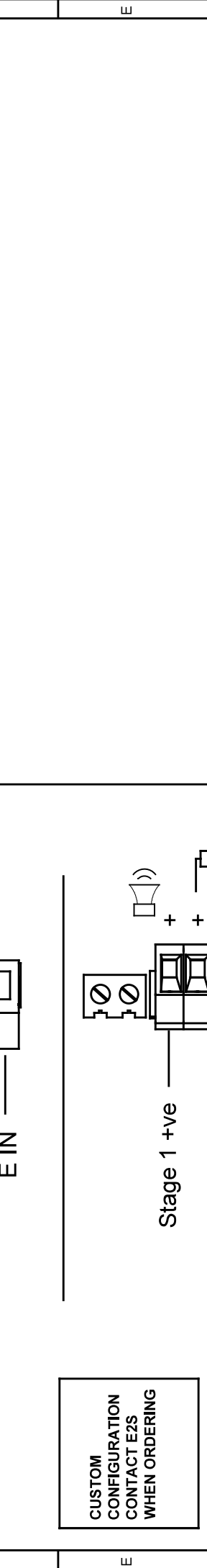
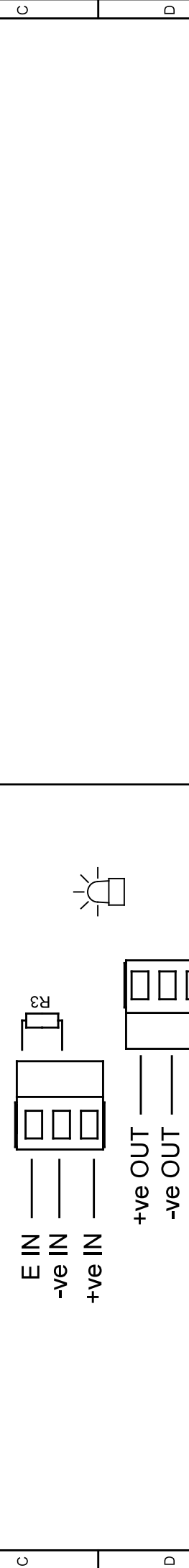
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EUROPEAN SAFETY SYSTEMS LTD.
AS PER LATEST DATE OF ISSUE SHOWN ABOVE

1	2	3	4	5	6	7	8	9	10						
<table border="1"> <tr> <td>ISSUE</td> <td>MOD No.</td> <td>REASON - INITIAL - DATE</td> </tr> <tr> <td>A</td> <td></td> <td>INTRODUCTION RSR - 16/03/2021</td> </tr> </table>										ISSUE	MOD No.	REASON - INITIAL - DATE	A		INTRODUCTION RSR - 16/03/2021
ISSUE	MOD No.	REASON - INITIAL - DATE													
A		INTRODUCTION RSR - 16/03/2021													

Independent Sounder & Beacon Activation (Remove Link Wires)

Two Stage Configuration
 Independent Stage Input
 Line Stage Monitoring (Use suitable monitoring relays/modules)
 Not to be used for reverse polarity monitoring
 Stage 1: Apply Power to Stage 1 +ve & Stage 1 -ve
 Stage 1: Apply Power to Stage 2 +ve & Stage 2 -ve

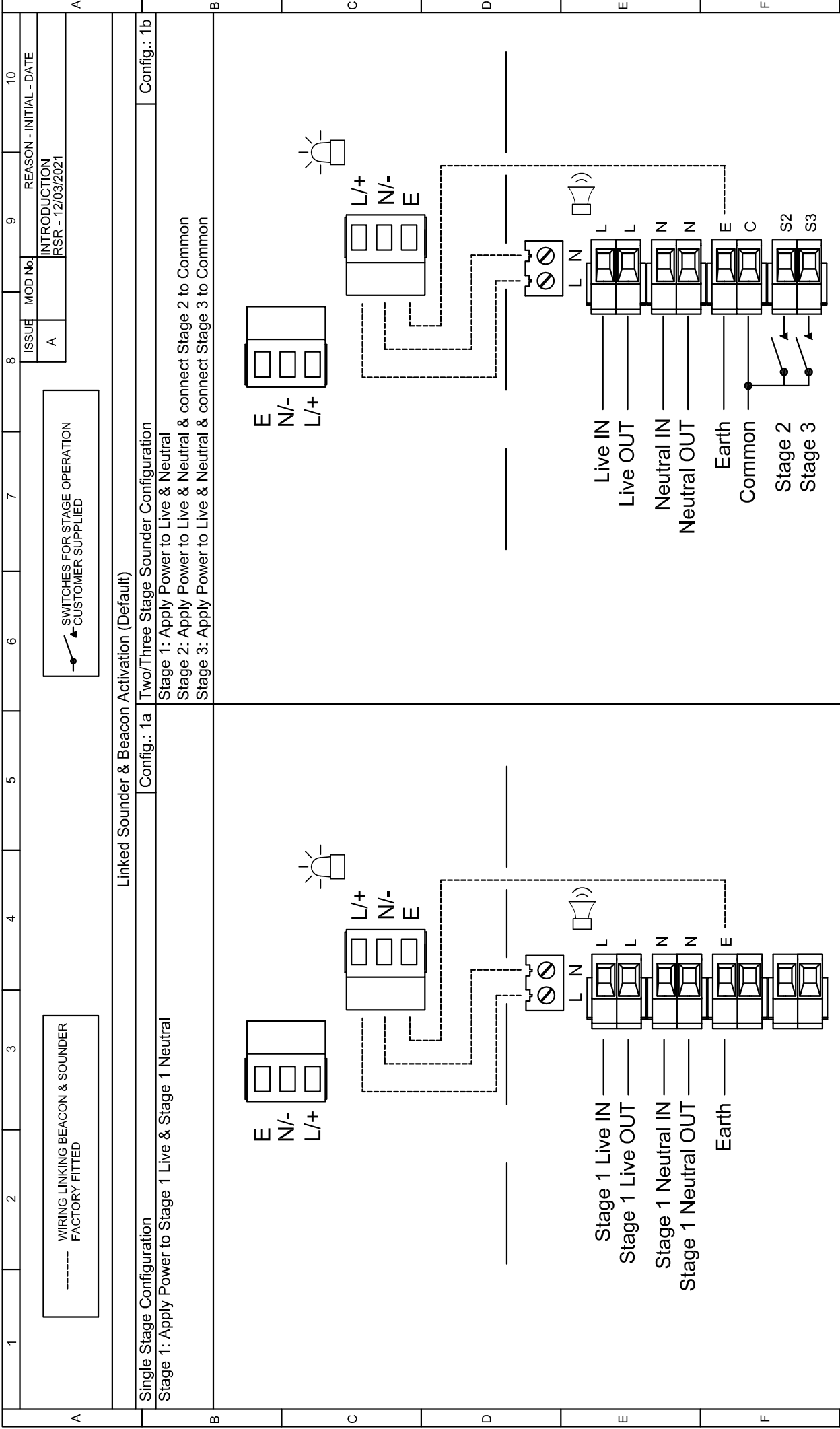


DRAWING TO BS6888:2000 GEOMETRIC TOLERANCES TO ISO1101:1983 LINEAR DIMENSIONAL TOLS ANGULAR DIMENSIONAL TOLS	DRAWN	DATE	SURFACE FINISH	WEIGHT (kg)
	R.S.RAIT	16/03/2021	MATERIAL	
	CHECKED	DATE	ALTERNATIVE MATERIAL	
STANDARDS ALERTALARM RANGE	B.ISARD	16/03/2021		
	APPROVED	DATE		
	R.N.POTTS	16/03/2021		

 EUROPEAN SAFETY SYSTEMS LTD 11 MANSELL ROAD ACTON LONDON W3 7QH WWW.E2S.COM	ALL DIMENSIONS IN MM IF IN DOUBT, ASK - DO NOT SCALE		A3
	TITLE AL112NH & AL121H DC COMBINED SOUNDER & LED WIRING DIAGRAMS	SCALE NTS	SHEET 6 OF 6

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EUROPEAN SAFETY SYSTEMS LTD.
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----- WIRING LINKING BEACON & SOUNDER
FACTORY FITTED

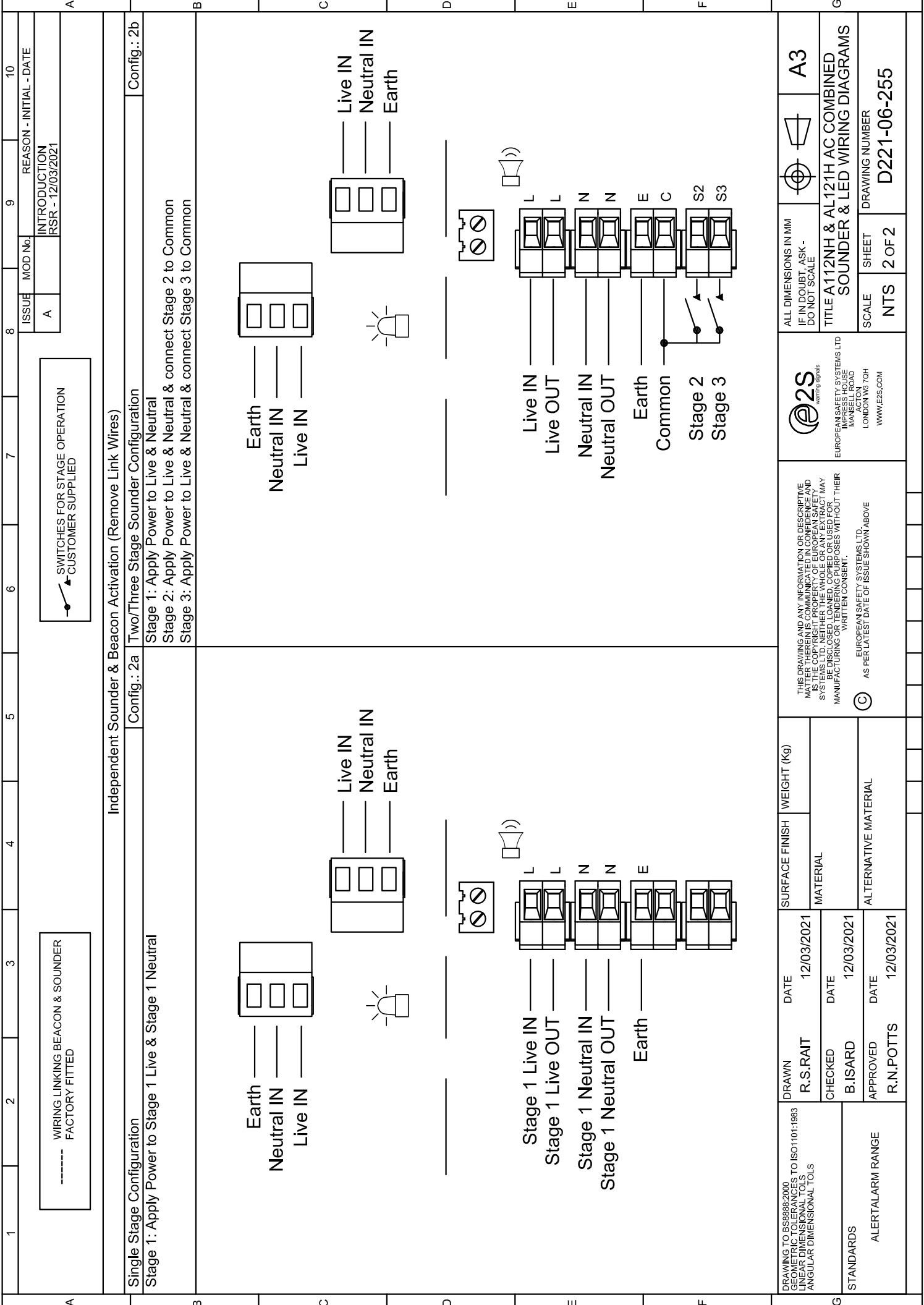
SWITCHES FOR STAGE OPERATION
CUSTOMER SUPPLIED

Linked Sounder & Beacon Activation (Default)

Single Stage Configuration
 Stage 1: Apply Power to Stage 1 Live & Stage 1 Neutral
 Config.: 1a

Two/Three Stage Sounder Configuration
 Stage 1: Apply Power to Live & Neutral
 Stage 2: Apply Power to Live & Neutral & connect Stage 2 to Common
 Stage 3: Apply Power to Live & Neutral & connect Stage 3 to Common
 Config.: 1b

DRAWING TO BS6888:2000 GEOMETRIC TOLERANCES TO ISO1101:1983 LINEAR DIMENSIONAL TOLS ANGULAR DIMENSIONAL TOLS	DRAWN	R.S.RAIT	DATE	12/03/2021	SURFACE FINISH	WEIGHT (kg)
	CHECKED	B.ISARD	DATE	12/03/2021		
STANDARDS ALERTALARM RANGE	APPROVED	R.N.POTTS	DATE	12/03/2021	ALTERNATIVE MATERIAL	
	<p>THIS DRAWING AND ANY INFORMATION OR DESCRIPTIVE MATTER THEREIN IS COMMERCIAL CONFIDENTIAL AND IS THE PROPERTY OF EUROPEAN SAFETY SYSTEMS LTD. NEITHER THE WHOLE OR ANY EXTRACT MAY BE DISCLOSED, LOANED, COPIED OR USED FOR MANUFACTURING OR TENDERING PURPOSES WITHOUT THEIR WRITTEN CONSENT.</p> <p>EUROPEAN SAFETY SYSTEMS LTD. AS PER LATEST DATE OF ISSUE SHOWN ABOVE</p>					
<p>EUROPEAN SAFETY SYSTEMS LTD WIRING SIGNALS ACTON LONDON W3 7QH MANSELL ROAD WWW.E2S.COM</p>		<p>ALL DIMENSIONS IN MM IF IN DOUBT, ASK - DO NOT SCALE</p>		<p>TITLE A12NH & AL12TH AC COMBINED SOUNDER & LED WIRING DIAGRAMS</p>		<p>A3</p>
SCALE		SHEET		DRAWING NUMBER		
NTS		1 OF 2		D221-06-255		



1 2 3 4 5 6 7 8 9 10

ISSUE MOD No. REASON - INITIAL - DATE
A

INTRODUCTION
RSR - 12/03/2021

SWITCHES FOR STAGE OPERATION
CUSTOMER SUPPLIED

WIRING LINKING BEACON & SOUNDER
FACTORY FITTED

Independent Sounder & Beacon Activation (Remove Link Wires)

Single Stage Configuration
Config.: 2a

Two/Three Stage Sounder Configuration
Config.: 2b

Stage 1: Apply Power to Live & Neutral
Stage 2: Apply Power to Live & Neutral & connect Stage 2 to Common
Stage 3: Apply Power to Live & Neutral & connect Stage 3 to Common

Earth
Neutral IN
Live IN

Live IN
Neutral IN
Earth

Stage 1 Live IN
Stage 1 Live OUT
Stage 1 Neutral IN
Stage 1 Neutral OUT
Earth

Live IN
Live OUT
Neutral IN
Neutral OUT
Earth
Common
Stage 2
Stage 3

Earth
Neutral IN
Live IN

Surface Finish Weight (kg)

Material

Alternative Material

Drawn R.S.RAIT

Checked B.ISARD

Approved R.N.POTTS

Date 12/03/2021

Date 12/03/2021

Date 12/03/2021

Standards

Alert Alarm Range

Surface Finish Weight (kg)

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